FIG. 1

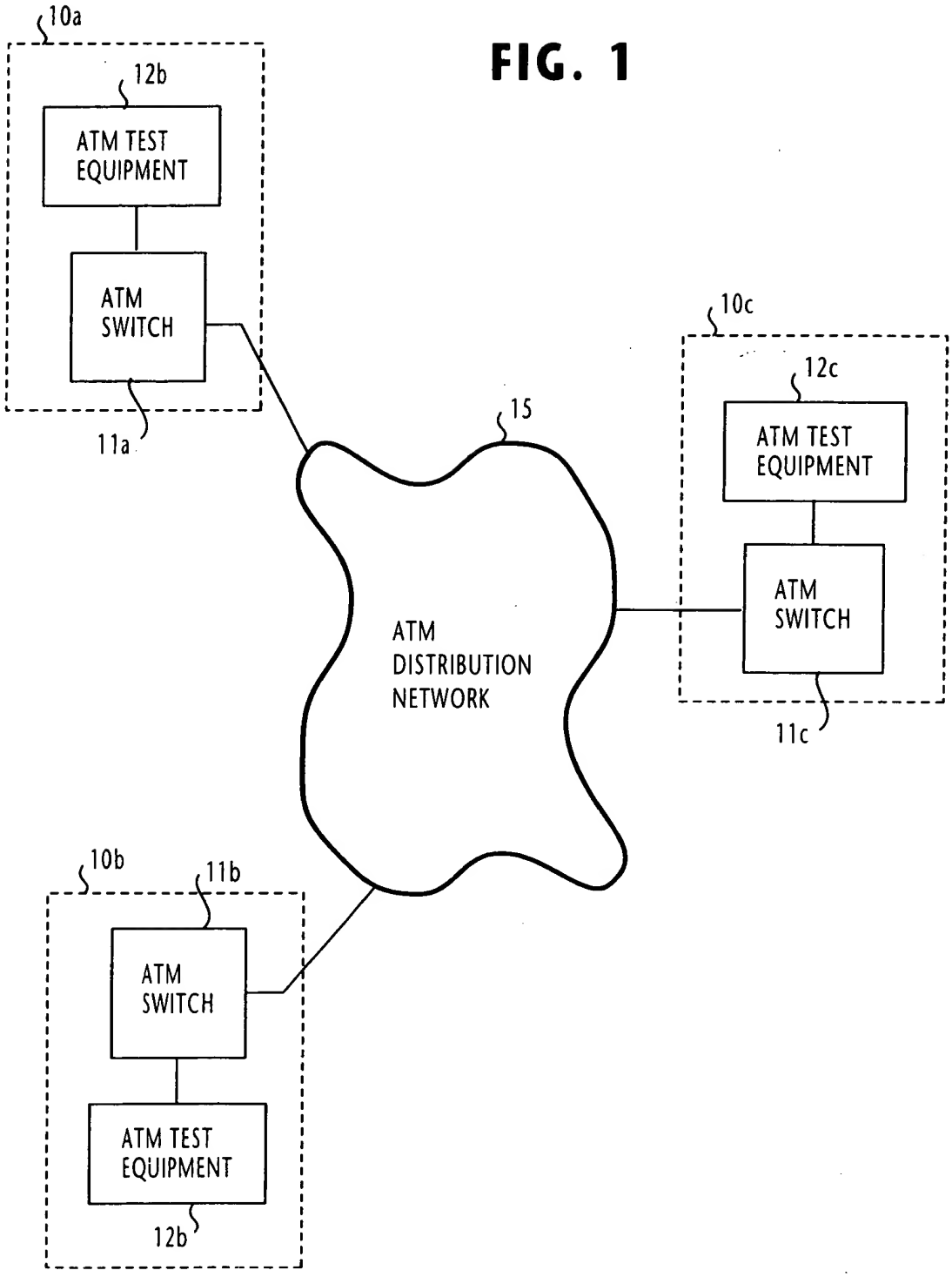

10a
12b
ATM TEST EQUIPMENT
ATM SWITCH
11a
15
ATM DISTRIBUTION NETWORK
10c
12c
ATM TEST EQUIPMENT
ATM SWITCH
11c
10b
11b
ATM SWITCH
ATM TEST EQUIPMENT
12b

FIG. 2A

LOOPBACK MODE

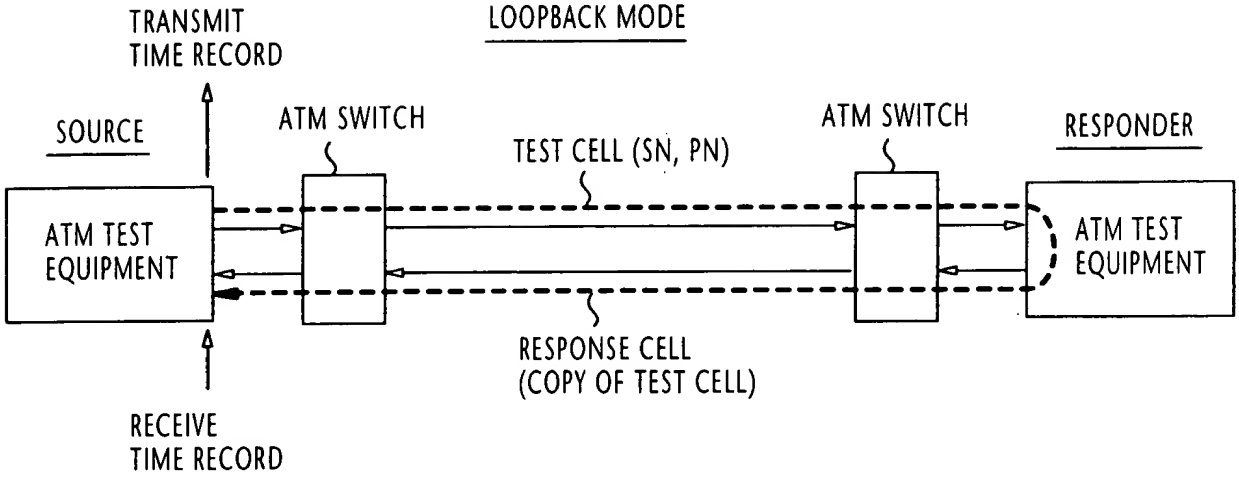


FIG. 2B

TWO-WAY MODE

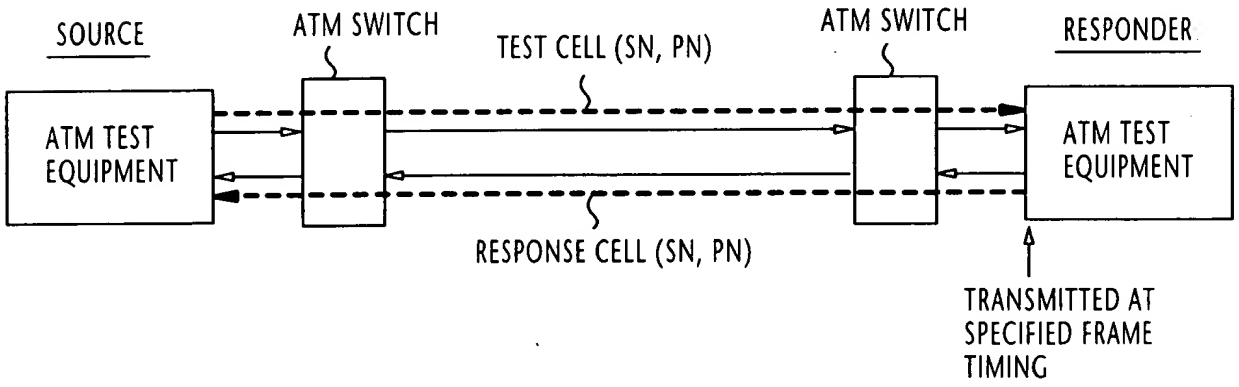


FIG. 2C

HANDSHAKING MODE

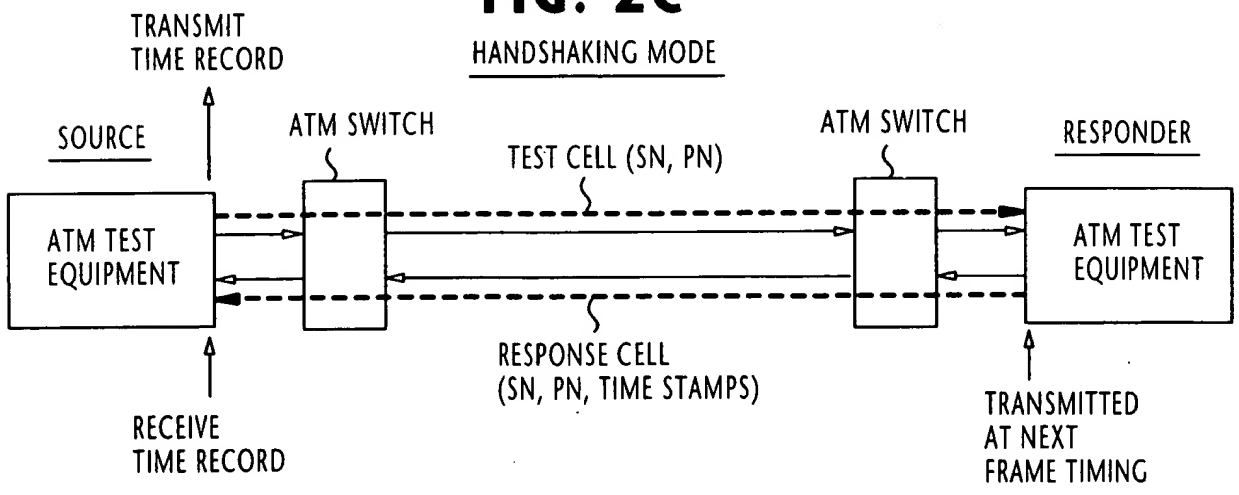


FIG. 3A

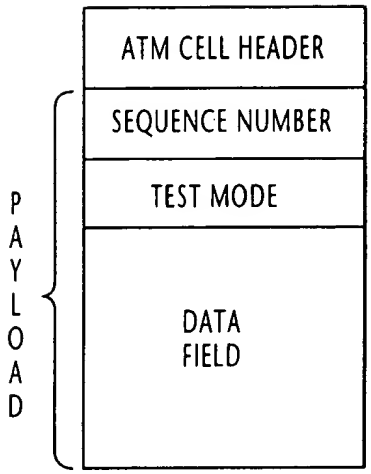


FIG. 3B

SOURCE AND RESPONDER NODES (LOOPBACK MODE)

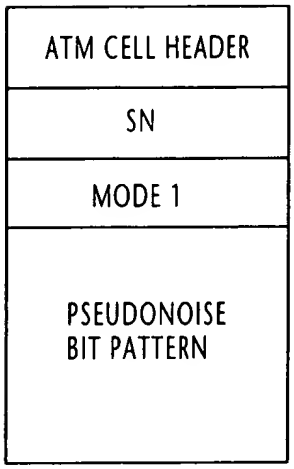


FIG. 3C

SOURCE AND RESPONDER NODES (TWO-WAY MODE)

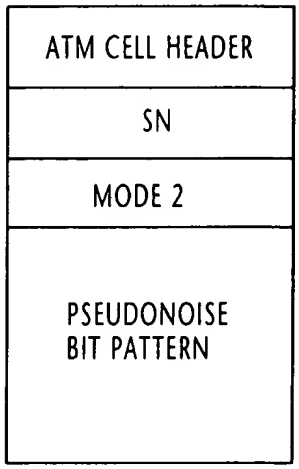


FIG. 3D

SOURCE NODE (HANDSHAKING MODE)

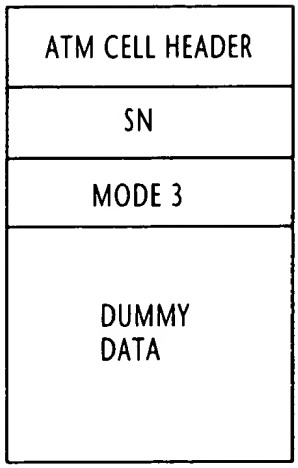


FIG. 3E

RESPONDER NODE (HANDSHAKING MODE)

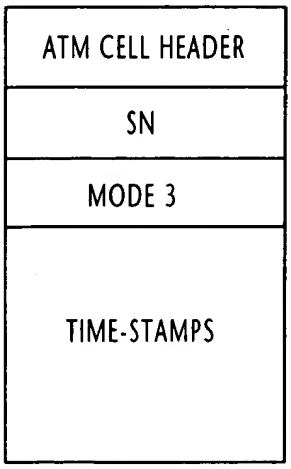
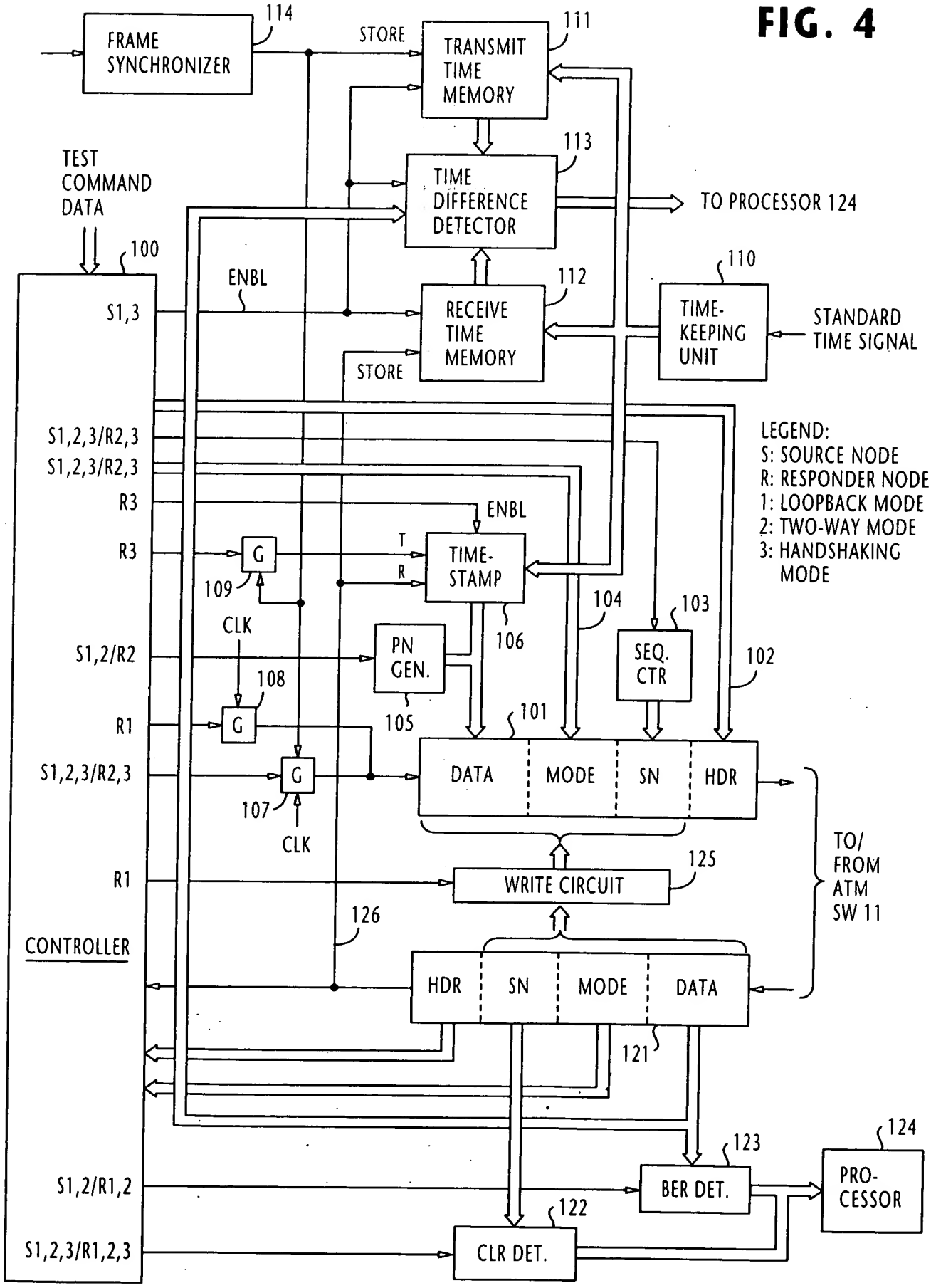


FIG. 4



LEGEND:
S: SOURCE NODE
R: RESPONDER NODE
1: LOOPBACK MODE
2: TWO-WAY MODE
3: HANDSHAKING MODE

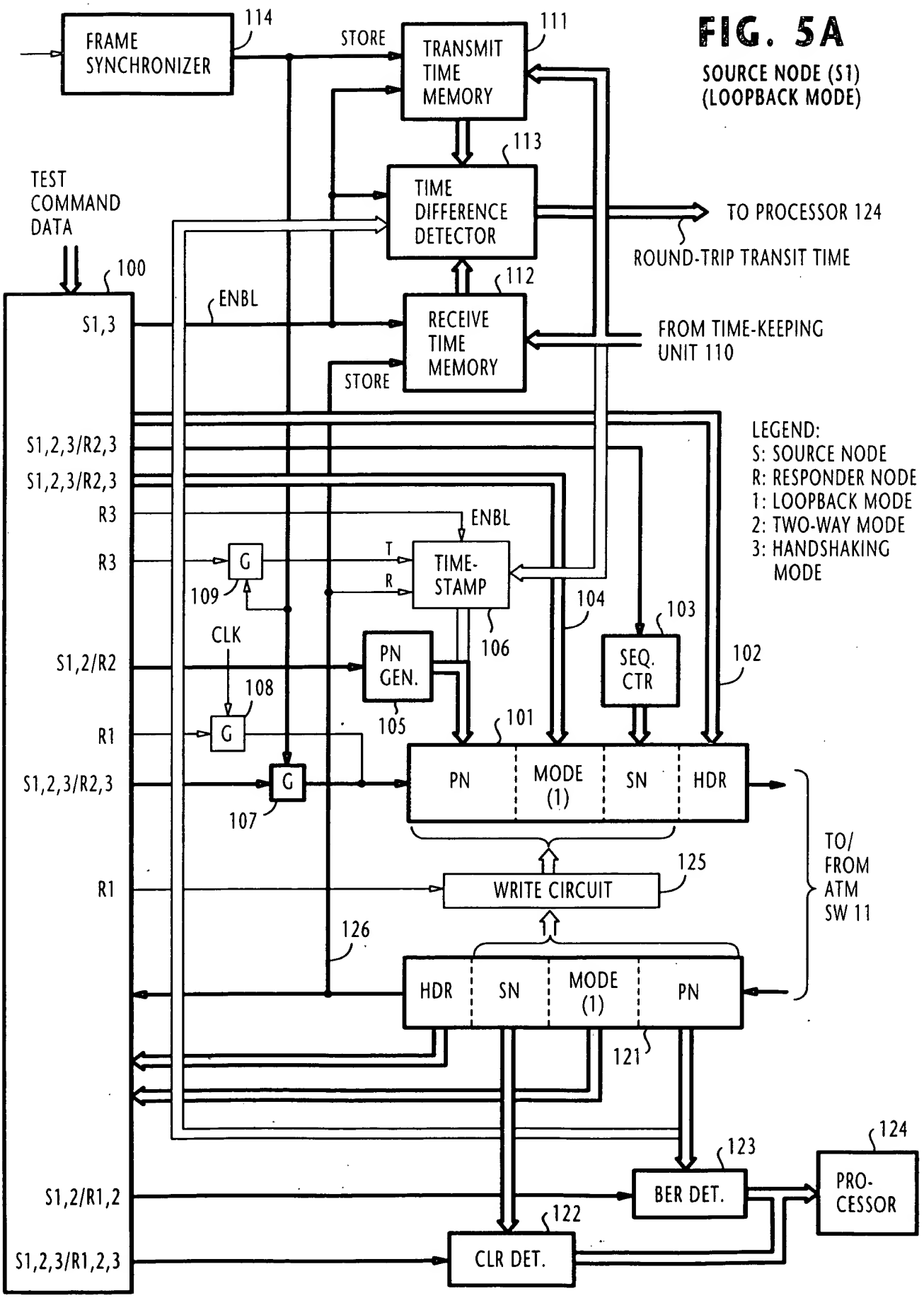


FIG. 5A

SOURCE NODE (S1)
(LOOPBACK MODE)

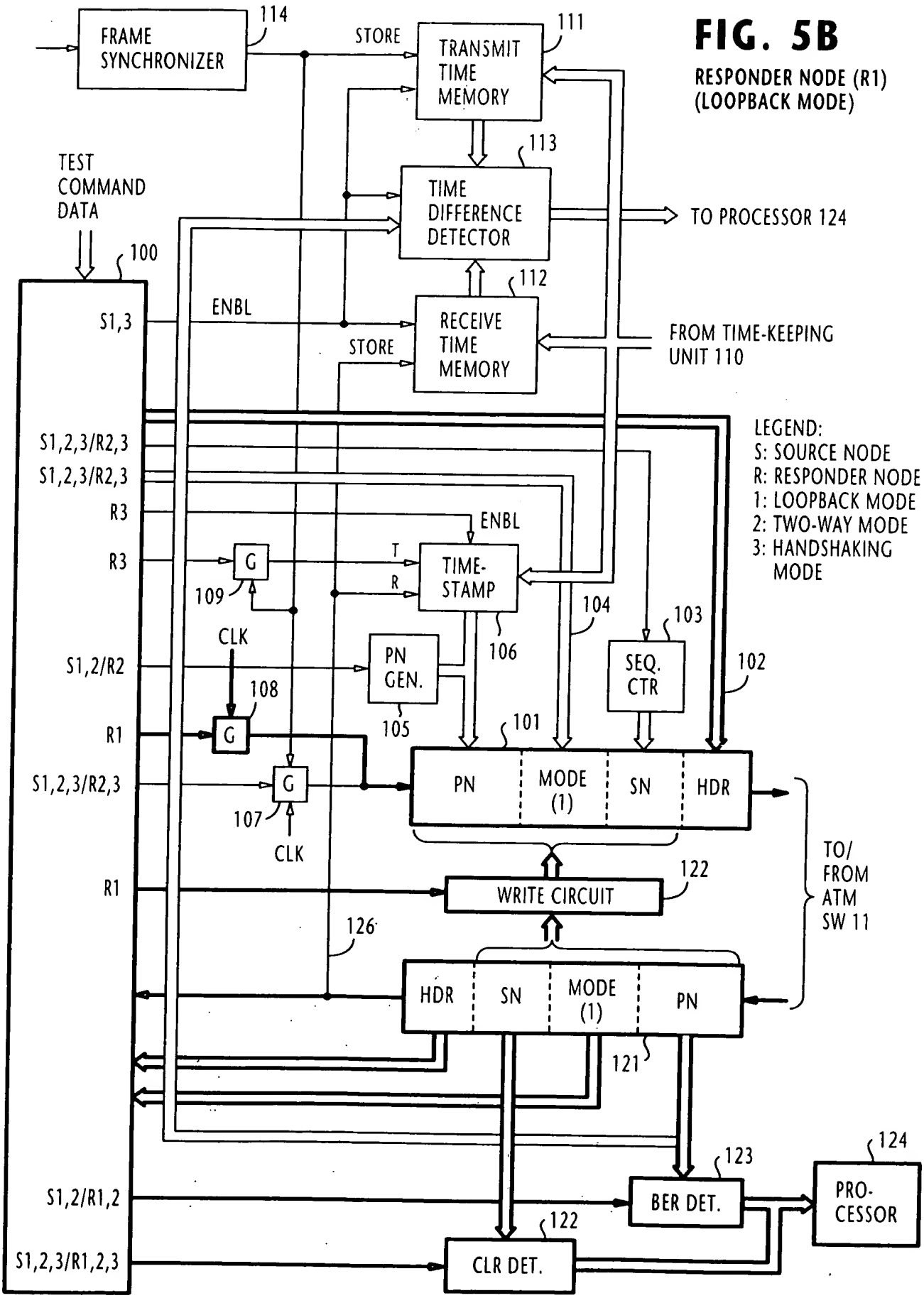


FIG. 5B

RESPONDER NODE (R1) (LOOPBACK MODE)

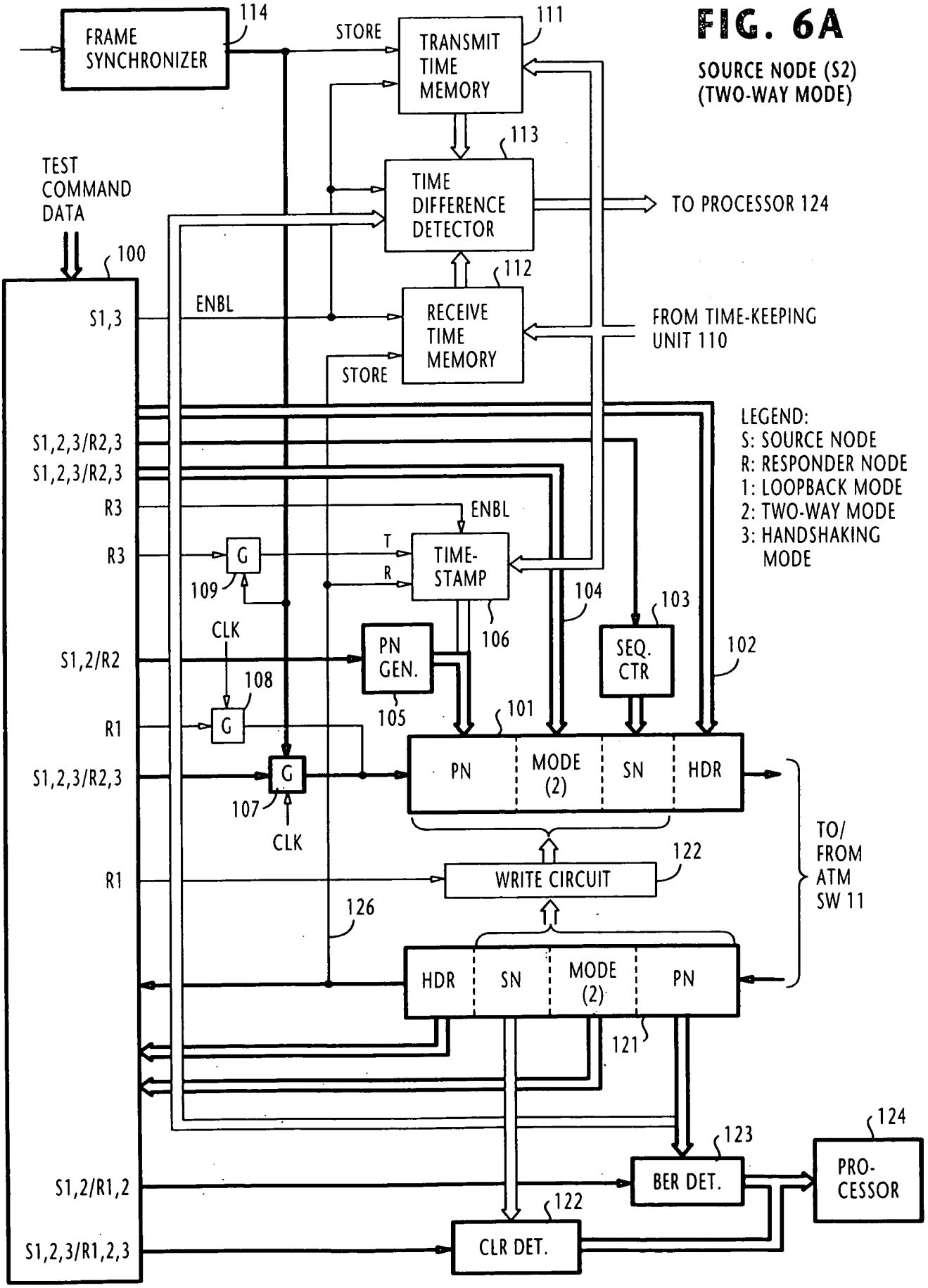
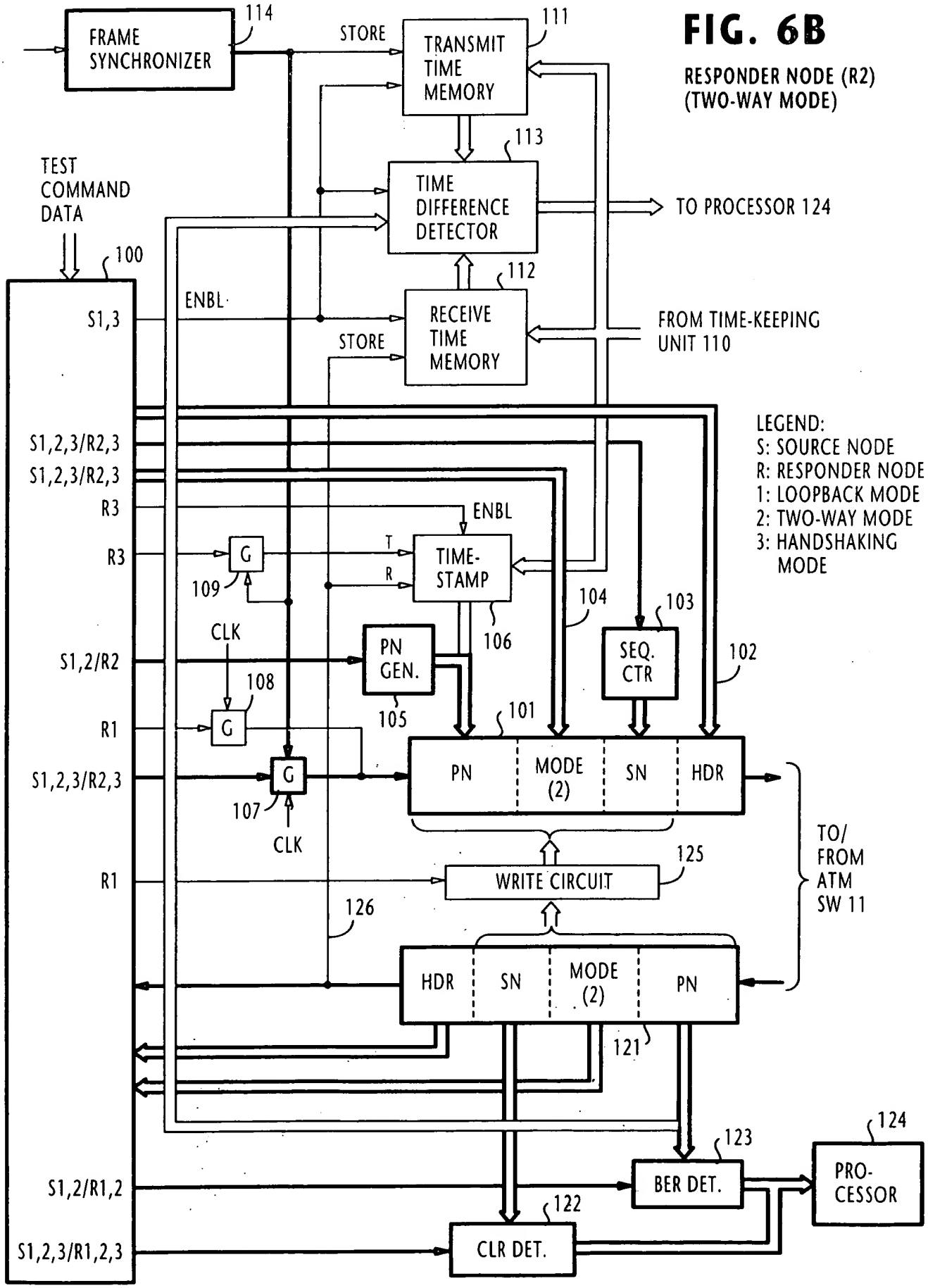


FIG. 6A

SOURCE NODE (S2)
(TWO-WAY MODE)

FIG. 6B

RESPONDER NODE (R2)
(TWO-WAY MODE)



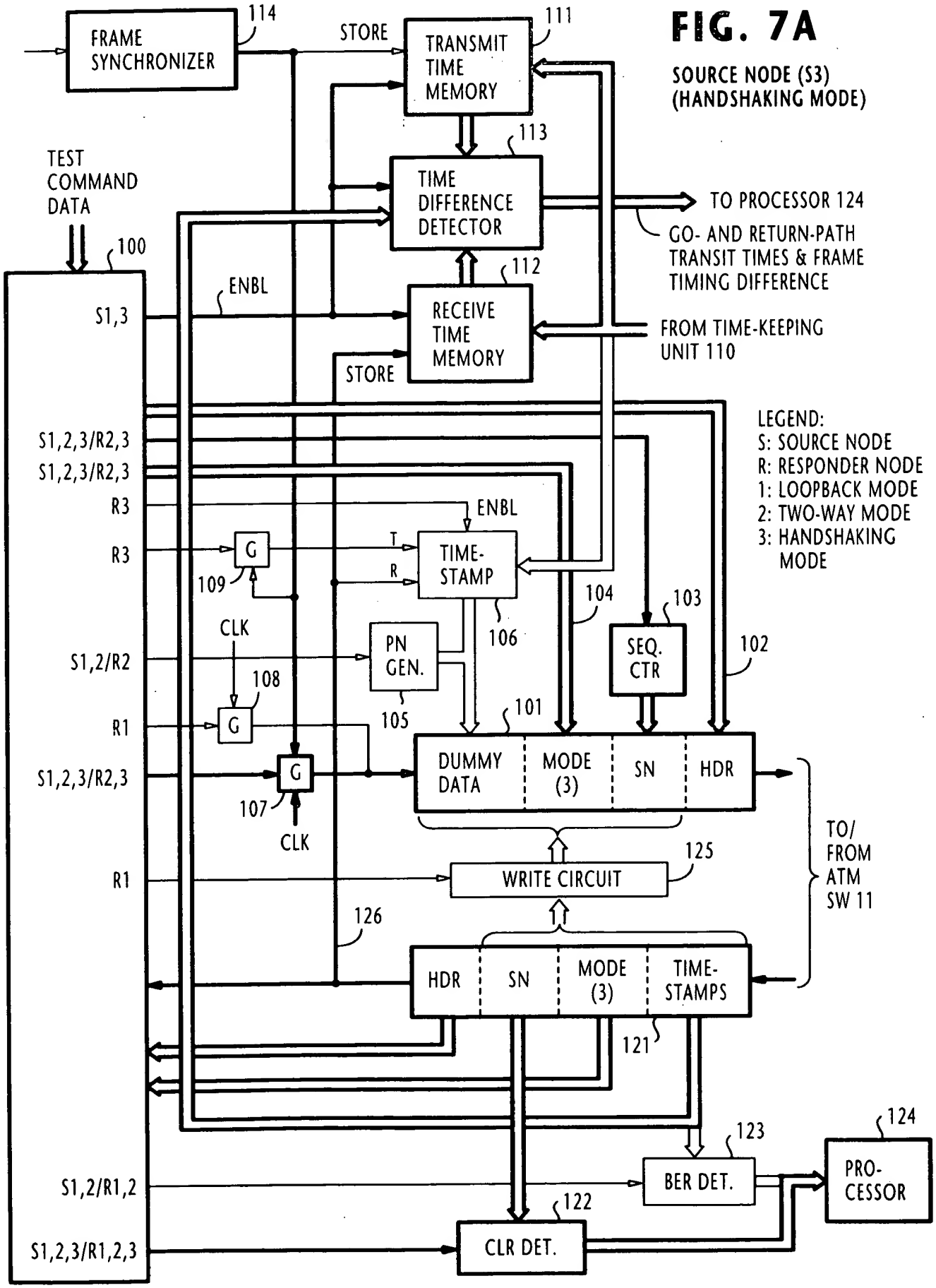


FIG. 7A

SOURCE NODE (S3)
(HANDSHAKING MODE)

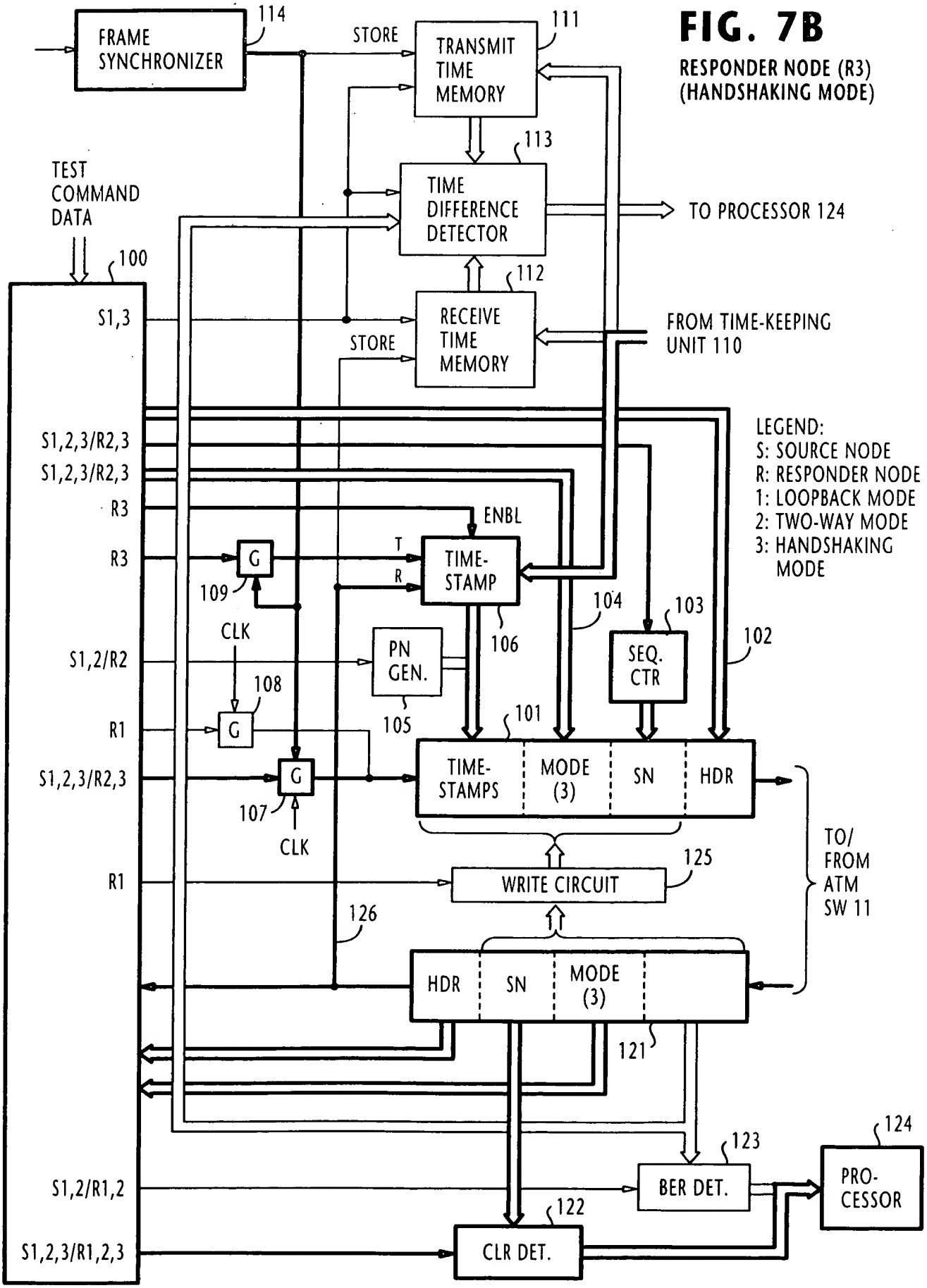


FIG. 7B

RESPONDER NODE (R3)
(HANDSHAKING MODE)

LEGEND:
S: SOURCE NODE
R: RESPONDER NODE
1: LOOPBACK MODE
2: TWO-WAY MODE
3: HANDSHAKING MODE

FIG. 8A LOOPBACK MODE

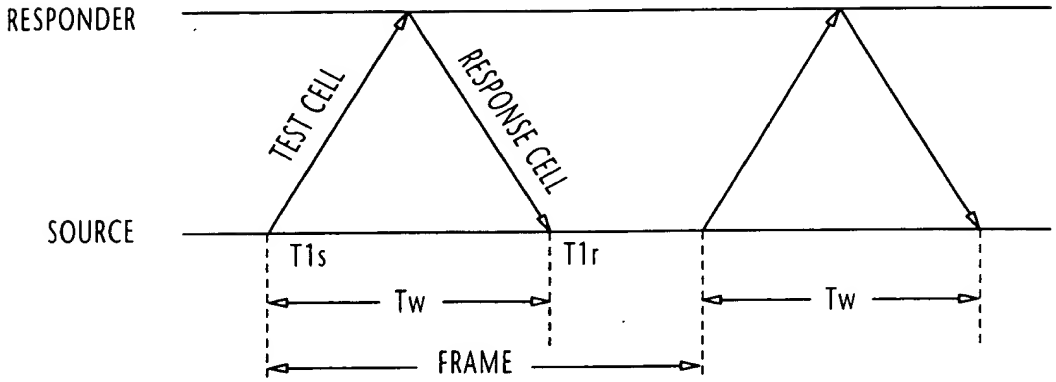


FIG. 8B TWO-WAY MODE

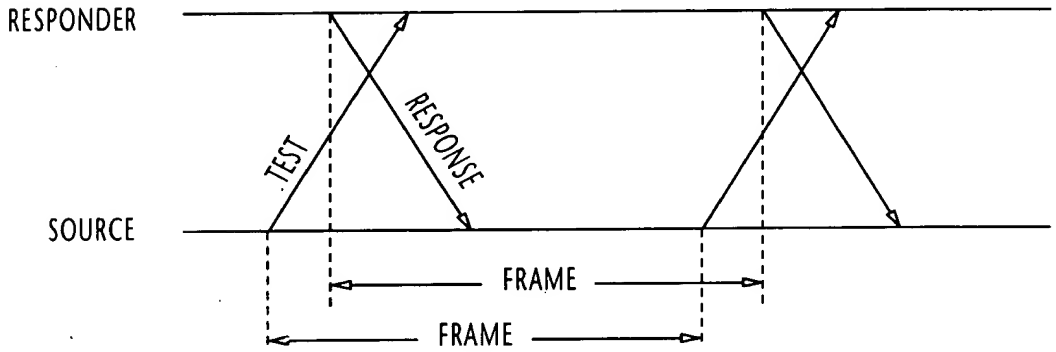


FIG. 8C HANDSHAKING MODE

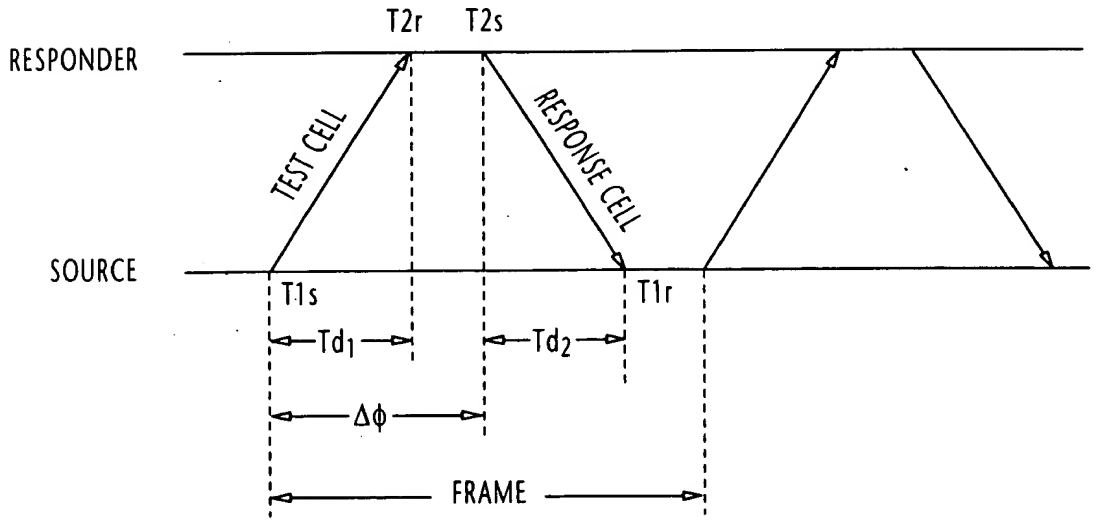
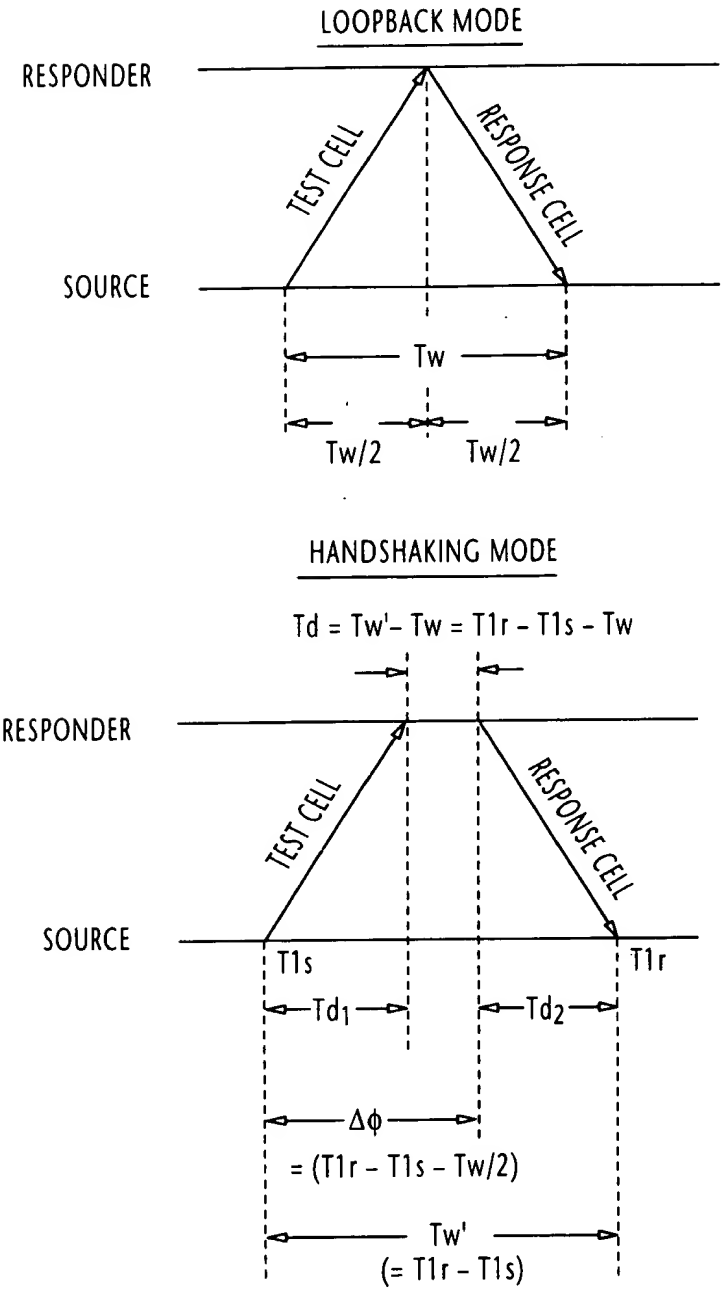


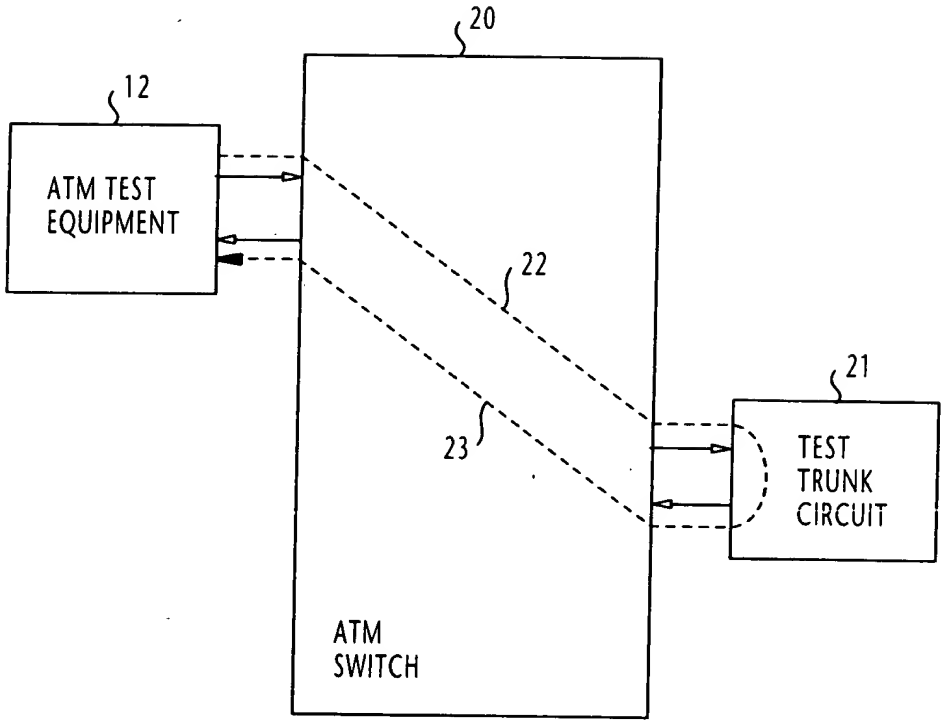
FIG. 9



$$Td_1 = \Delta\phi - Td = \Delta\phi - (T1r - T1s - Tw)$$

$$Td_2 = Tw' - \Delta\phi = T1r - T1s - \Delta\phi$$

FIG. 10


20
12
ATM TEST EQUIPMENT
22
21
23
TEST TRUNK CIRCUIT
ATM SWITCH